

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

## Sulfadoxine-pyrimethamine still confers benefit

For more information on the effect of sulfadoxinepyrimethamine resistance on malaria control during pregnancy see JAMA 2007; 297: 2603–16; D01:10.1001/jama.297.23.2603 Sulfadoxine-pyrimethamine (SP), when given to pregnant women, is still effective at protecting the mother and fetus from malaria-related complications, despite increased parasite resistance making the drug less effective in children, according to findings from a systematic review.

"Malaria in pregnancy is a silent killer because most women do not develop symptoms and infections remain undetected and untreated. These silent infections result in maternal anaemia and low birthweight, which leads to higher infant mortality. About 100 000 infants die every year in Africa because of the malaria-associated impact on birthweight", said lead author Feiko ter Kuile (Liverpool School of Tropical Medicine, UK). Strategies to control malaria during pregnancy are therefore crucial.

The review concluded that even in areas with moderate SP resistance,

two-dose intermittent preventive therapy with SP continues to provide substantial benefit to HIV-negative pregnant women, even in areas where one in four treatments fail in children. However, more frequent dosing is required in HIV-positive women; trials have shown that these women do not respond well to standard SP therapy.

Women with HIV tend to have a higher risk of delivering low-birthweight infants. Francesco Checchi (London School of Hygiene and Tropical Medicine, UK) commented: "The most important finding of the study is that monthly treatment is superior to the standard two-dose regimen in HIV-positive women. Thus, the recommendation to provide these monthly doses must not just remain on paper, but should be implemented".

According to ter Kuile, SP is the only drug that is currently used for

prevention of malaria in pregnancy in Africa, but increased resistance has led to much greater treatment failures in children. "Most countries are switching to newer antimalarial drugs. However, it is not yet known if they can be safely used for malaria prevention in pregnant women, and it will take several years before this is established", said ter Kuile.

Carl Craft (Medicines for Malaria Venture, Geneva, Switzerland) told *TLID*: "There is an urgent need for new drugs that can be used in pregnancy. We will likely have several effective and affordable new drugs within the next 2 years. While new drugs are being developed, this and further research is important to show how presently available drugs can be use more effectively in women and children".

Cathel Kerr

## SARS survivors fail to recover by 1 year, say researchers



For more information on 1-year outcomes in survivors of SARS in Canada see Arch Intern Med 2007; 167: 1312-20; DOI:10.1001/ archinte.167.12.1312

For more information on 1-year outcomes in survivors of SARS in Hong Kong see Chest 2005; 128: 2247-61; DOI:10.1378/ chest.128.4.2247 Canadian severe acute respiratory syndrome (SARS) survivors were still having health problems 1 year after their acute illness, according to researchers at the University of Toronto, Canada.

The SARS epidemic in Canada killed 43 people in the Toronto area, including three health-care workers, between March and August, 2003. 208 people had acute illness but survived, and 117 of them took part in a 1-year follow-up study. According to the study, pulmonary function results were in the normal range for all patients, but 18 patients walked a substantially shorter distance in 6 min (more than 50 metres less than expected) compared with age and sex-matched controls.

"SARS patients who had been critically ill had similar physical sequelae to survivors of non-epidemic

acute respiratory distress syndrome but had worse psychosocial outcomes: 17% of patients had not returned to work and 51 of the 117 had made multiple visits to psychiatry or psychology practitioners", explained lead author Margaret Herridge.

Siew Eng Chua (University of Hong Kong, Hong Kong, China) noted that SARS survivors in Asia have experienced similar problems and recommends that "recognition and management of psychosocial sequelae of infectious diseases should be a vital long-term imperative".

In a related study, David S C Hui (The Chinese University of Hong Kong, Shatin, Hong Kong) identified significant continuing psychological problems in 55 Hong Kong survivors at 24 months, compared with the general population, even though their lung function was normal. "The

results from Canada are therefore not surprising; the long period of isolation and extreme uncertainty during the initial serious SARS illness created enormous psychological stress", he said. Chua agreed: "1 year after SARS exposure in Hong Kong, 30% of our recovered patients had moderate depression, 40·7% had moderate anxiety, and most had persistently raised stress levels compared with controls", she said.

"The fact that Canadian and Asian studies both reveal psychological sequelae of an epidemic infectious disease, despite the different cultural contexts, shows how robust a finding this is", commented Herridge. "In the future, it will be important to prevent the social isolation that has caused so much suffering", she added.

Kathryn Senior